

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1074 to 1122

2-2



2-2



5250 126
53-2 205



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1074
Linnæus
Linnæus

Put over 1 Beam Trawl
at 1.10 PM. in 18 fathoms
of water. at 1.30 hove in
Trawl. Containing- 2 Dozen
Shrimp, 1 Small Sturgeon. about
one foot long. and 2 doz. Small
~~perch~~. Rock Fish. Several
young Menhaden. 1 perch
Several flounders (2 kinds)

Thurs. 12th Lt 100. N x W. 12. W. 4 3/4

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1074*

Date, *March 11 - 1882*

Locality, *Off West Island*

Bearings, *South point of West Island bearing E x N. 1 1/4*

Time of day, *1.10 P.M.*; of tide, *Ebb*

State of sky, *Clear*

Temperature of air, *51*

" surface of water,

" at depth of fathoms,

" of bottom, *41*

Depth, in fathoms, *15 - 12 - 11*

Nature of bottom, *Black mud*

Direction of ~~surface current~~, *Wind N.W.*

Force of ~~surface current~~, *Wind 3*

Direction of ~~bottom current~~, *Drift S.S.W. 1 mi*

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *Fish Commission*

Name and rank of commanding officer, *Lieutenant*

Z. L. Tanner, U.S.N.

Name and position of observer,

1075

REMARKS.

Trawl was put over
in 14 fathoms of water at
9.45 A.M. At 10 A.M.
hove in Trawl - Containing
Several Small Rock also
some young Crabs fish.

1075
n.3. 47995
TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
Current number of observation, *1075*
Date, *Mar 13 1882*
Locality, *Off Kent Island*
Bearings, *Sandy Pt. Lk. N. X W. 1/4 W.*
3.72
Time of day, *9.45 Am.* of tide, *flood*
State of sky, *Partly Cloudy*
Temperature of air, *45*
" surface of water, *43*
" at depth of fathoms,
" of bottom, *40*
Depth, in fathoms, *14 - 11 -*
Nature of bottom, *mud*
Direction of ~~surface~~ current, *Wind N.W.*
Force of ~~surface~~ current, *Wind 5*
Direction of ~~bottom~~ current, *Drift N.W.*
Force of bottom current,
Name of vessel, *Fish Hawk*
To what service attached, *Fish Commission*
Name and rank of commanding officer, *Lieutenant*
J. L. Tanner, U.S.N.
Name and position of observer,

REMARKS.

~~Put Oyster Dredge over
at 2.20 P.M. in 6 fms of
water. At 2.27 hove in
Dredge - containing~~

TEMPERATURE RECORD.

Instrument used,

Oyster Dredge

Current number of observation,

Date,

Mar 11-1882

Locality,

Bearings,

Time of day, 2.20 P.M. of tide,

State of sky,

Partly Cloudy

Temperature of air,

48

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

6 - 7 -

Nature of bottom,

Mud

Direction of ~~surface current~~,

Wind

Force of ~~surface current~~,

Wind

Direction of ~~bottom current~~,

Drift c.c.r

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Fish Commission

Name and rank of commanding officer,

Lieutenant

B. L. Tanner, W.S.N.

Name and position of observer,

1096

REMARKS.

Beam Trawl was put over
 at 10.15 in 15 fathoms
 of water. Hove up Trawl
 at 10.36 and it containing
 several small Roach, flounder
 and 2 small Crampish

1075.
(12.3.47995.)

TEMPERATURE RECORD.

Instrument used, *1 Beam Trawl*
Current number of observation, *1075*
Date, *Mar. 13. 1882.*
Locality, *Off Key-Bank*
Bearings, *Sou by E 1/2 S 1/2 W*
3.
Time of day, *10.15 am*; of tide, *Flood*
State of sky, *Partly Cloudy*
Temperature of air, *45*
" surface of water, *43*
" at depth of fathoms,
" of bottom, *40*
Depth, in fathoms, *15*
Nature of bottom, *Mud.*
Direction of ~~surface current~~, *Wind NW.*
Force of ~~surface current~~, *Wind 5*
Direction of ~~bottom current~~, *Drift - NW*
Force of bottom current,
Name of vessel, *Fish Hawk*
To what service attached, *Fish Commission*
Name and rank of commanding officer, *Lieut.*
J. L. Tanner, U.S.N.
Name and position of observer,

1077

REMARKS.

Drift on Beach from
at 10.55 AM in 11 fathoms
of water at 11.13. Some very
small shells containing
several small shells, thin
& some small crabs etc.

1077

TEMPERATURE RECORD.

Instrument used, *Beam Trawl.*
 Current number of observation, *1077*
 Date, *March 13, 1882*
 Locality, *Off Kent Island*
 Bearings, *Sandy Pt. L. E. 40 N. 40 W.*
S. 11.
 Time of day, *10.55 AM* of tide, *Flood*
 State of sky, *Partly Cloudy*
 Temperature of air, *49*
 " surface of water, *43*
 " at depth of fathoms,
 " of bottom, *40*
 Depth, in fathoms, *11 - 12.*
 Nature of bottom, *Blue mud.*
 Direction of ~~surface~~ current, *Wind 90.0.0*
 Force of ~~surface~~ current, *Wind 5*
 Direction of ~~bottom~~ current, *Drift 2.0.0*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
J. L. Tanner, U.S.N.
 Name and position of observer,

ing the Tingley many
{all bearings magnetic?}

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1078*
Date, *Aug 2^d 1892*
Locality, *Cape Cod*
Bearings, *Nauset Beacons*
2 1/2 W 1/2 N dist 10 m
Time of day, *7-30 AM* of tide,
State of sky, *b. c.*
Temperature of air, *72°* *sig. surface water*
" surface of water, *63.4. 47.886.*
" at depth of *5* fathoms, *56.4. 47.886.*
" of bottom, *37- 4. 47.885-*
Depth, in fathoms, *53 = 5.5-*
Nature of bottom, *gn. mud & sand*
Direction of ~~surface~~ current, *Wind to S.W. Force 2*
Drift:
Force of surface current, *S by W 1/2 m.*
Direction of bottom current.
Force of bottom current,
Name of vessel, *U.S. Fish Com.*
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

W. B. Allen
U.S. Fish Com.

REMARKS.

Hippoglossus platessimus

radialis 4

is Chess & Tennis

9. *Diplopoda* (millipede) common

See the Chemist's Table, p. 100.

Cyrtocentrus ~~*Centrus*~~ *deani*

Macis Sabulosa

Leptothorax pinnatus

Paraceras arctica +

Glycymeris deliqua

Light of 1.000000 in. diameter

Alisma aculeata

Col. L. & Mrs. Miller

Egg of a gastropod

Hypodaphnia

c. *piticius* ~~modicus~~ ca. Clona

1079

Instrument's name, *Hand*

TEMPERATURE RECORD.

Instrument used, *Hand*Current number of observation, *1079*Date, *August 2nd 1892*Locality, *Cape Cod*Bearings, *House of Beacon*
*11 W by a 24 28 1/2*Time of day, *8-20 AM*; of tide,State of sky, *bc*Temperature of air, *69°*" surface of water, *63.5°*" at depth of *5* fathoms, *56.5* at *10 fms 44*" of bottom, *37*Depth, in fathoms, *59 = 61.5*Nature of bottom, *fine sand*Direction of ~~surface~~ current, *Wind 100 Force 3*Force of ~~surface~~ current, *Drift 282 1 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*To what service attached, *U.S. Fish Comm.*

Name and rank of commanding officer,

Lieut. J. E. Turner USN

Name and position of observer,

*J. J. Chick**Alban K. 200*

REMARKS.

1.0234 52.5
 1.0242 58
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TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

16

Date,

Aug 2nd 1877

Locality,

Cape Cod

Bearings,

Harbor Beacons

NW by W 1/2 W dist 5 m

Time of day,

9-40 am of tide.

State of sky,

bc

Temperature of air,

69

" surface of water, 61.5

" at depth of 5 fathoms, 56 at 10 fms 45

" of bottom, 37

Depth, in fathoms, 53 = 55 fms

Nature of bottom,

fine sand

Direction of surface current,

W 8 W force 2

Force of surface current,

drift NW 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U S Fish Commission

Name and rank of commanding officer,

Lieut. J. E. Turner USN

Name and position of observer,

J. J. B. Fish
Warden USN

REMARKS.

1881 1882 1883
 1884 1885 1886
 1887 1888 1889

1890 1891 1892
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 1962 1963 1964

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 1968 1969 1970
 1971 1972 1973

1974 1975 1976
 1977 1978 1979
 1980 1981 1982

1983 1984 1985
 1986 1987 1988
 1989 1990 1991

TEMPERATURE RECORD.

Instrument used,

Current number of observation.

Date.

Locality.

Bearings.

Time of day, _____; of tide, _____.

State of sky,

Temperature of air,

" surface of water, 5-6

" at depth of 5 fathoms, — at 10 fms 40

" of bottom, 39

Depth, in fathoms, $32 = 33.5$

Nature of bottom, Crs gy s. s. v. sh.

Direction of surface current, $\frac{1}{2} \frac{d\theta}{dt} \frac{1}{\sin \theta}$

Force of surface current, 11.2×10^4 dynes/cm

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached, *U. S. Army Corps*

Name and rank of commanding officer,

Name and position of observer,

1082

REMARKS.

1000	10235	62
1000	10235	57
1000	10235	52

Caprimulgus
Chamaelea
Melospiza
Leucosticte

Justs same as 1076

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day,

State of sky,

Temperature of air,

" surface of water,

" at depth of 5 fathoms,

" of bottom, 40

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1053
REMARKS.

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11316 1152
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11318 1154
11319 1155
11320 1156
11321 1157
11322 1158
11323 1159
11324 1160
11325 1161
11326 1162
11327 1163
11328 1164
11329 1165
11330 1166
11331 1167
11332 1168
11333 116

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, 2.20 : of tide,

State of sky,

Temperature of air,

" surface of water, 62 =

" at depth of 5 fathoms,

" of bottom, 38 =

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

radical 4
 Hippoglossoides platessoides
 Muræinoides fumellus 4
 Muræon

Larves myxobellus

Lophosetta pacifica
Limanda *prospiciens*
Y. H. Mearns *collected*
1894
TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1085

Date, Oct 10 1894

Locality, San Francisco

Bearings, 130

Time of day, 6.15 A.M.; of tide,

State of sky, B.

Temperature of air, 67

" surface of water, 67

" at depth of 5 fathoms, 67 at 10 fms 67

" of bottom, 34

Depth, in fathoms, 33 = 34

Nature of bottom, gy. m.

Direction of surface current, wind

Force of surface current, 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm.

Name and rank of commanding officer, Lieut. R. E. Turner U.S.N.

Name and position of observer, J. Mearns

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1086

Date,

Locality,

Bearings,

Time of day, 7:50 ; of tide,

State of sky,

Temperature of air, 72

" surface of water, 64

" at depth of fathoms, 10

" of bottom, 37

Depth, in fathoms, 37

Nature of bottom,

Direction of surface current, 3

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,

H. L. L. Tanner USN

Name and position of observer,

1087

REMARKS.

1.02 32-63

1.02 33-6

1.02 34-6

5 _____ *Microbryum*

3

X

X

X

Microbryum -

Capnia -

Trichoptera -

Chironomidae -

Syntherisma -

Hydropsyche -

Glyptotendipes -

Rana -

Crepidula -

TEMPERATURE RECORD.

Instrument used, *159*

Current number of observation, *1087*

Date, *July 10 1887*

Locality, *off Cape Cod*

Bearings, *from Cape Cod Light*

Time of day, *8:30* ; of tide, *low*

State of sky, *bc*

Temperature of air, *84*

" surface of water, *62.5*

" at depth of *5* fathoms, *46.1*

" of bottom, *gy. s. m.*

Depth, in fathoms, *44 = 40*

Nature of bottom, *gray sand*

Direction of surface current, *drift*

Force of surface current, *1.0 mi/hr*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer, *W. L. L. Lanner USN*

Name and position of observer, *W. B. B. B.*

REMARKS

Sum 1023 64

5- 4623 63

10737 635

no further

1

11 December 1971

George H. Brown

[Faint handwritten notes]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Quercus - *Q. alba* - *Q. prinus*

1. *Chlorophyll a* and *Chlorophyll b* contents were determined by spectrophotometry using the method of Lichtenthaler and Whaley (1987).

Antony John

10/10/70

1940

16

1990

Euchelyopsis sinensis

Care should be taken in making many
Boatmen's log
Boatmen's log
TEMPERATURE RECORD.

Instrument used,

Current number of observation, *10*

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky, *bc*

Temperature of air, *55*

" surface of water, *62*

" at depth of *5* fathoms, *59.5 at 10 fms*

" of bottom, *38*

Depth, in fathoms, *86 = 90*

Nature of bottom, *fine sand*

Direction of surface current, *light N 1/2 E*

Force of surface current, *1 1/2 mi*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *US Fish Comm*

Name and rank of commanding officer,

Lt. L. L. Lawrence, USN

Name and position of observer,

J. B. Smith

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation.

Date, *Sept 10*

Locality, *Off Cape Cod*

Bearings, *20 miles*

Time of day, *11:20*; of tide.

State of sky, *bc*

Temperature of air, *78*

" surface of water, *63*

" at depth of fathoms,

" of bottom, *38, 5'*

Depth, in fathoms, *103-110*

Nature of bottom, *fine sand*

Direction of surface current, *drift N by E*

Force of surface current, *1/2 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer,

Lt. L. L. Tanner USN

Name and position of observer,

W. B. Smith
U.S. Fish Comm

REMARKS.

Chess

Myrmica ruginodis

Thapsus of the embryos

John B. Jones

Korea (Japan) (China)

Mytilus modiolalis, Buscaco 1901

Ida truncata, Lill. / *hypnoida*

Strophomena striolatum, x, 150, dorsal.

Small spherical, yellow, and hard.

Lophoceros

1. *Chlorophyll a* (Chl *a*)

Cyrtodes Russellii

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1070

Date, Dec 22 1899

Locality, 10° 15' N 157° 15' W

Bearings, 10° 15' N 157° 15' W

Time of day, 10:55 AM; of tide,

State of sky, 1

Temperature of air, 24.5

" surface of water, 62

" at depth of 5 fathoms, 56 10/100 52

" of bottom, 33

Depth, in fathoms, 126-11

Nature of bottom, 114 10/100

Direction of surface current, 11 2 11

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer

A. L. Lanner JRM.

Name and position of observer,

M. J. S. Cook
Master

1091

REMARKS.

Depth	Water Specimens	Temp.	Reduced to 60°
Surface			
5 fms			
10 "			

Leathys (Mongus) 2 & 3

Physic Chuss - abundant
 and on beach at low
 tide. Numerous same.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1091*

Date, *Aug 11 1882*

Locality, *off Cape Cod*

Bearings, *Lat - 40° - 03' N*
Long 69° - 44' W

Time of day, *5.30* ; of tide,

State of sky, *b. c.*

Temperature of air, *77*

" surface of water, *75*

" at depth of *5* fathoms, *at 10 fms 62*

" of bottom, *46*

Depth, in fathoms, *62 = 65 fms*

Nature of bottom, *Grey Sand & broken shells*

Direction of ~~surface current~~ *Wind* Force *3*

~~Force of surface current~~ *Drift* *Dist*

~~Direction of bottom current~~ *Temperature at* *fms*

~~Force of bottom current~~

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm.*

Name and rank of commanding officer, *W. B. Fernald, Master*

Name and position of observer,

1092

REMARKS.

Summer 18237 71

4 June 18238 72

10 June 18239 73

... .. 7.27

... .. 7.27

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

Arctostaphylos

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Arctostaphylos

Arctostaphylos

Arctostaphylos

TEMPERATURE RECORD.

Instrument used, *111111*

Current number of observation, *1072*

Date, *Aug*

Locality, *North Tropic*

Bearings. *Lat 39°-58' N*

Long. 69°-42 W

Time of day, *6.54*; of tide,

State of sky, *10*

Temperature of air, *79*

" surface of water, *75*

" at depth of fathoms,

" of bottom, *41*

Depth, in fathoms, *194 = 202*

Nature of bottom, *gray sand*

Direction of surface current, *11.00 3*

Force of surface current, *10.00 3/4 mile.*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *US Fish Comm*

Name and rank of commanding officer,

Lt. L. L. Tanner USN

Name and position of observer,

W. L. L. Tanner

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1093*
 Date, *Aug 11*
 Locality, *off Cape Cod*
 Bearings, *Lat 39°-56'-00" N*
Long 69°-45'-00" W
 Time of day, *3:45* ; of tide,
 State of sky, *b, c*
 Temperature of air, *82*
 " surface of water, *75*
 " at depth of fathoms,
 " of bottom, *40*
 Depth, in fathoms, *336-349*
 Nature of bottom, *Sand + mud*
 Direction of surface current,
 Force of surface current, *1 mile*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *U. S. Fish Comm.*
 Name and rank of commanding officer, *J. B. L. Tanner, Lt.*
 Name and position of observer,

1094

REMARKS.

Decr 10232 77
 5 10235 76
 10 10235 76

Locust ... 1035 ... 1050

up 13.32

at 10.15 ...

128 = 133 ...

Sealatus 3, Pairs ...

... bilinearis

... ..

...
 Careproctus

TEMPERATURE RECORD.

Instrument used, *surface Trawl*

Current number of observation, *1094*

Date, *Aug 1, 1882*

Locality, *off Nantuxet Vineyard*

Bearings, *Lat 39°-57'N
Long 69°-47'W*

Time of day, *1:10* ; of tide, "

State of sky, *bc*

Temperature of air, *84*

" surface of water, *~~75~~ 76*

" at depth of fathoms,

" of bottom, *HC*

Depth, in fathoms, *289 - 301*

Nature of bottom, *blue mud*

Direction of surface current, *drift*

Force of surface current, *1.5 mi*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer, *A. L. L. Tanner U.S.N.*

Name and position of observer,

1095-
REMARKS.

100 100 100
100 100 100
100 100 100

100 100 100
100 100 100
100 100 100
100 100 100

100 100 100
100 100 100
100 100 100
100 100 100

Synaptobranchus pinnatus 2

TEMPERATURE RECORD.

Instrument used, *aneroid bar*

Current number of observation, *1095*

Date, *Aug 11 92*

Locality,

Bearings, *Lat 39°-55'-28" N 82*
Long 69°-47'-00" W

Time of day, *11:55* ; of tide,

State of sky, *b c*

Temperature of air, *82*

" surface of water, *71*

" at depth of *5* fathoms, *71 1/2* at *10* *72*

" of bottom, *46*

Depth, in fathoms, *309 = 321*

Nature of bottom, *soft mud*

Direction of surface current, *Force 2*

Force of surface current, *NNW 1/2 W 3/4 mile*

Direction of bottom current, *SE 1/2 E*

Force of bottom current, *1/2*

Name of vessel, *U.S.S. Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer, *Lt. L. L. Tanner U.S.N.*

Name and position of observer, *...*

Temp at 3:30 pm taken simult. with temp at 11:55

1096

REMARKS.

1.0 2 30 70

1.0 2 30 70

1.0 2 30 70

Rowley 155 Kach. 2000 1.0 2

to 1.0 2 30 70

Mytilus edulis *Mytilus*

Callinectes *Microph*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

Mytilus *Mytilus* *Mytilus*

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

195

Date,

Aug 10 1895

Locality,

Off Cape Cod

Bearings,

Lat. 39°-53' N

Long 69°-47' W

Time of day,

1:39 PM; of tide.

State of sky,

bc

Temperature of air,

78

"

surface of water,

75.2

"

at depth of

3

fathoms,

75.2 at 10 fms 65

"

of bottom,

HC

Depth, in fathoms,

305 = 317

Nature of bottom,

fine sand

Direction of surface current,

Wind

W. by N Force 3

Force of surface current,

North

Force 1/2

Direction of bottom current.

Force of bottom current,

Name of vessel,

Albatross Hawk

To what service attached,

U.S. Fish Comm

Name and rank of commanding officer,

Lieutenant Z. S. Tanner U.S.N.

Name and position of observer,

Midshipman J. B. Bask

U.S.N.

1.234 74

1.234 74

Trawl over 3.20. Bottom at 3.32.
haul up 4.05

At 4.05 - Sounded in 81 = 85

Carminatus
Merluccius bilinearis 100
Merluccius bilinearis 100
Merluccius bilinearis

Merluccius bilinearis 100
Merluccius bilinearis 100
Merluccius bilinearis

Merluccius bilinearis 100
Merluccius bilinearis 100
Merluccius bilinearis

Halibut 100
Paralichthys oblongus 1

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *107*

Date, *June*

Locality, *off Cape Cod*

Bearings, *Lat 39°-54' N*
Long 69°-44' W

Time of day, *3:10* ; of tide,

State of sky, *b-c*

Temperature of air, *76*

" surface of water, *75 1/2*

" at depth of fathoms,

" of bottom, *4 1/2*

Depth, in fathoms, *152 = 158*

Nature of bottom, *fine sand*

Direction of surface current, *drift 1/2 mile 3*

Force of surface current, *1/2 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer,

H. L. L. Lanner
Name and position of observer.

Surf 1,0237 70

Surf 1,0238 70

Surf 1,0239 73 1/2

Surf 1,0240 74 1/2

Surf 1,0241 75

Surf 1,0242 76-79

Surf 1,0243 77-79

Surf 1,0244 78-79

Surf 1,0245 79-80

Surf 1,0246 80-81

Raia eglantera

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality.

Bearings.

Time of day, ; of tide.

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms.

Nature of bottom,

Direction of surface current.

Force of surface current.

Direction of bottom current.

Force of bottom current.

Name of vessel,

To what service attached,

Name and rank of commanding officer.

Name and position of observer,

1099
REMARKS.

4 74

5
Anotinus argyrops
Polioptila mexicana
Prionoxystus carolinensis

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1784*
Date, *Aug 1884*
Locality, *Vineyard Sound*
Bearings, *North by East 1/2 East*
1 1/2 miles
Time of day, *1:50* ; of tide, *High Flood Trawl*
State of sky, *bc*
Temperature of air, *76*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *71 1/2*
Depth, in fathoms, *6*
Nature of bottom, *Sand & shells*
Direction of surface current, *Wind North Force 2*
Drift NE 1/2 N 1/2 mile
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel, *Fish Hawk*
To what service attached, *U.S. Fish Comm*
Name and rank of commanding officer,
Lt. L. L. Tanner USN
Name and position of observer,
J. B. Cook
U.S. Fish Comm

1100
REMARKS.

Stenotomus argyrops
 Pseudocottus caudatus
 Ambloplites atrarius 2 juv

TEMPERATURE RECORD.

Instrument used,

Current number of observation. 1152

Date, Aug 26 1882

Locality, 1/4 mile S. of Pt. Ledge

Bearings, 110° 24' N. 1/4 mile

Time of day, 11:47

; of tide, Flood (easterly)

State of sky, bc

Temperature of air, 77

" surface of water, 72

" at depth of fathoms,

" of bottom, 71 1/2

Depth, in fathoms, 4 3/4

Nature of bottom, sand, shells

Direction of surface current, 2

Force of surface current, 112

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,

Lt. L. L. Fanner USN

Name and position of observer,

W. B. Fish
Master USN

1101
REMARKS.

200
2
Shore and water

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *110*

Date, *Aug 12 - 1892*

Locality, *off Cape Cod*

Bearings, *about 1/2 N. by E.*

Time of day, *2.5*; of tide, *high*

State of sky, *3.*

Temperature of air, *78*

" surface of water, *72*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *5*

Nature of bottom, *shells*

Direction of surface current, *277 N. by E. 1/2 S.*

Force of surface current, *1 1/2 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm.*

Name and rank of commanding officer,

Lt. L. L. Tanner USN

Name and position of observer,

*Josiah
W. H. H. H.*

1102
REMARKS.

Surf. 16224 71
16224 69
Surf. 16224 69

TEMPERATURE RECORD.

Instrument used, *7. 2. 11*

Current number of observation, *1002*

Date, *July 11, 1881*

Locality, *Indianapolis, Indiana*

Bearings, *East of the city*

Time of day, *110*

; of tide, *black (night)*

State of sky, *32*

Temperature of air, *73*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *07*

Depth, in fathoms, *5*

Nature of bottom,

Direction of surface current,

Force of surface current, *E 1/2 N*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer,

Lt. L. L. Tanner USN

Name and position of observer,

*J. M. White
Mid. M.*

1103
REMARKS.

1022870

70

Comatula carolinensis

Sophopsetta maculata

Pleuronectes angrocephalus many

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1103

Date,

Aug 18th 1882

Locality,

Vineyard Sound

Bearings,

Cape Chop Light Ho.

N. W. by W

2 3/4 miles

Time of day, *1.42*

; of tide, *slack time*

State of sky,

O. C.

Temperature of air,

70

"

surface of water,

70

"

at depth of

fathoms,

"

of bottom,

69

Depth, in fathoms,

5

Nature of bottom,

Coarse sand

Direction of ~~surface~~ ^{*wind*} current,

N. E. Force 2

Force of surface current,

Direction of ~~bottom~~ ^{*light*} current,

E. by S 1/4 mi

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Comm.

Name and rank of commanding officer,

Lt. L. L. Tanner U.S.N.

Name and position of observer,

Frederick W. W. W. W.

1104

REMARKS.

Aug. 10228 7.

Aug. 10229 70

Prionotus carolinus (juv.)

Blennius argenteus (juv.)

Prionotus carolinus (juv.)

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1104

Date,

Aug 15th

Locality,

off Cape Cod

Bearings,

East 60° N

run 1 1/2 hr

4 miles

Time of day,

2:12

; of tide,

High (end of ebb)

State of sky,

b

Temperature of air,

79

"

surface of water,

70

"

at depth of

fathoms,

"

of bottom,

69

Depth, in fathoms,

8 1/2

Nature of bottom,

shells

Direction of surface current,

Wind

ENE

Force of surface current,

Drift

N x W 1/4 N

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Fish Comm

Name and rank of commanding officer,

H. L. L. Lanner USN

Name and position of observer,

*J. B. High
USN*

1105-
REMARKS.

2nd 1.0226/70

3rd 1.0228/70

4th 1.0228/70

Lophositta maculata 2 (large)
Stenatorus argyrope (short) juv

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1105

Date,

Aug 18 1902

Locality,

Vineyard Sound

Bearings,

Cape Cod Pt. Light

2 x N distant 1 mile

Time of day,

3:00

; of tide,

State of sky,

b

Temperature of air,

8

" surface of water,

72

" at depth of

fathoms,

" of bottom,

71

Depth, in fathoms,

10

Nature of bottom,

Coarse sand

Direction of surface current,

Wind

NE

3

Force of surface current,

1/2

NE

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Fish Com

Name and rank of commanding officer,

Lt L. L. Tanner USN

Name and position of observer,

J. B. Smith
Midw USN

1106
REMARKS.

11227 72

Fautepalaena adspersa !
Heubleria argyrops (Hb.)

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day,

State of sky,

Temperature of air,

" surface of water,

" at depth of

fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1107

REMARKS.

Specific Gravity

1000	1.0244	67
5 fms	1.02	67
10 "	1.03	68

Trawl over 6.12 samples
 heaving in 6.46 up 4.54
 220 fms out
 7.15. 1.03

Ret-trawl-lines

TEMPERATURE RECORD.

Instrument used, *Trawl (case of empty)*

Current number of observation, *1107*

Date, *Aug 22 1882*

Locality, *off Nantuxat Island*

Bearings, *Lat 40°-02' N
Long 70°-35' W*

Time of day, *11:00*; of tide,

State of sky, *bc*

Temperature of air, *69 1/2*

" surface of water, *71*

" at depth of *5* fathoms, *71 1/2* at *10 fms* *66*

" of bottom, *48*

Depth, in fathoms, *111 = 116*

Nature of bottom, *gray mud*

Direction of surface current, *Wind from Force 2*

Force of surface current, *1 1/2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer,

Lt. L. L. Tanner USN

Name and position of observer,

J. A. Blish

1108

REMARKS.

Specific Gravities

Surface	1.0243	67
5 fms	42	67
10 "	42	67

Sawd over 6.55 down 7.07

up 7.37 up 7.50 30 fms out

Physiculus (18) R. in crinoid

Paralichthys oblongus 6

Lepidichthys cyprinoides 5

Myxine glutinosa 1

A. parichthys 1

C. parichthys 1

Hyporhamphus chalybeius

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

1108

Date,

Aug. 22 1882

Locality.

Off Cape Cod, N. E. of Nantucket

Bearings.

Lat. $40^{\circ}-02' N$
Long $70^{\circ}-37'-30'' W$

Time of day, 6.55 ; of tide.

State of sky,

bc

Temperature of air,

69 1/2

" surface of water, 71

" at depth of fathoms,

" of bottom, 48

Depth, in fathoms,

77 = 101

Nature of bottom.

fine sand & shells

Direction of surface current.

much faster from the

Force of surface current.

1 mile N. W. 1/2 E

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U. S. Fish Comm

Name and rank of commanding officer,

Lt. Z. L. Tanner USN

Name and position of observer,

J. B. Shook
Midn USN

1169

REMARKS.

S. frigidus 1000000

Surface 1.0243 66

5 fms 43 66

10 " 44 66

Trawl over 800 down 800

Trawl in 800 of 800 1000000

Scorpaena (3) Physic Chrus 200

Physic Chrus 1000 1000000

49.000 (1000000) 1000000

Tria 1000 9 1000000

TEMPERATURE RECORD.

Instrument used, *Boat*

Current number of observation, *1109*

Date, *Aug 22 1891*

Locality, *off Cape Cod*

Bearings, *Lat 40°-03' N*
Long 70°-38' W

Time of day, *7:55* ; of tide, *low*

State of sky, *bc*

Temperature of air, *70 1/2*

" surface of water, *71*

" at depth of _____ fathoms,

" of bottom, *49*

Depth, in fathoms, *85 = 89*

Nature of bottom, *fine sand*

Direction of surface current, *drift North 40° E*

Force of surface current, *1 1/2 mi*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Com.*

To what service attached, *U.S. Fish Com.*

Name and rank of commanding officer, *U.S. Fish Com.*

Name and position of observer, *U.S. Fish Com.*

1110

Draw over 9.25 down 7.35

Citharusichthys *Barr* from 1841

Conferva lactiflora *Scia cylindrica*

mycho June 12-60

1. *Chilodactylus* *Chilodactylus*

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1110

Date,

Aug 23 1891

Locality,

off Cape Cod

Bearings,

*Lat 40°-02' N
Long 70°-35' W*

Time of day,

9.16

; of tide,

State of sky,

bc

Temperature of air,

75

" surface of water,

72

" at depth of

fathoms,

" of bottom,

47

Depth, in fathoms,

96 = 100

Nature of bottom,

fine sand & green mud

Direction of surface current,

drift North 2

Force of surface current,

drift N x N 1/2 W 1'

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Fish Comm.

Name and rank of commanding officer,

Wm. H. Smith, Master

Name and position of observer,

Wm. H. Smith

REMARKS.

1111
 Surface 1.0239 71
 5 fms 40 70
 10 " 40 72

Trawl over 10.50 down 10.57
 Hauling in 11.30 up 11.40 300 fms. 100
Isalishthys oblongus juv
Uca squamea *Uca* *thor*
Mytilus *edulis* *edulis* *edulis*
Helicium *filicinosa* *filicinosa*
Macrurus *canaliculatus*
 On Trawl Line approx. *Spilichthys*
Myxus (tunas) *Raja* *laevis*
Tuna *caudata* *caudata*

TEMPERATURE RECORD.

Instrument used,

Bref. Sea Level

Current number of observation.

1111

Date,

Aug 22 / 1882

Locality.

off Martha's Vineyard

Bearings.

Lat. $40^{\circ}-01'-33''$ N dx
Long $70^{\circ}-35'$ W

Time of day, 10.45 ; of tide,

State of sky,

bc

Temperature of air,

76

" surface of water,

72 242 # 46402

" at depth of 5 fathoms,

71

" of bottom,

47

Depth, in fathoms,

117 = 124

Nature of bottom,

fine sand

Direction of surface current.

near NE force 2

Force of surface current.

1'

Direction of bottom current,

Force of bottom current.

Name of vessel,

Fish Hawk

To what service attached,

US Fish Comm

Name and rank of commanding officer.

W. L. L. Tanner 1882

Name and position of observer,

J. J. [unclear]
Widm NW.

1112
REMARKS.

Specific Gravity
Surface 10240 69

41 70

40 69

Trawl 12.55 down 1.05

Leaving 13 up 1.05

430 fms out

Urophycis piscatorius, *Urophycis* 11

Urophycis *minimus* stomach of *Urophycis*

Urophycis *scuticosa* & *Urophycis* *scut*

Urophycis *micro* *Urophycis*

Urophycis *radiata*, *Urophycis* 11

Urophycis *Chesleyi* 11 *Urophycis* 11

Urophycis *Chesleyi* *Urophycis* 11

Urophycis *Chesleyi* (ru)

TEMPERATURE RECORD.

Instrument used, *Hyd. Therm.*

Current number of observation, *1112*

Date, *Aug 3 2 1902*

Locality, *off Cape Cod*

Bearings, *Lat 39°-56' N
Long 70°-35' W*

Time of day, *1243* ; of tide, *bc*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *72*

" at depth of *5* fathoms, *72 at depth 6 fms*

" of bottom, *43*

Depth, in fathoms, *235 = 245*

Nature of bottom, *fine sand & shells*

Direction of surface current, *NE Force 1*

Force of surface current, *NW x N 1'*

Direction of bottom current, *at 20 fms 44*

Force of bottom current, *Force 1*

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer, *Lt. Z. P. Tanner USA*

Name and position of observer, *J. B. Smith
Midw. Comm*

1113
REMARKS.

Alcyon *frankii*
 Surfact 20240 68
 5 fms 40 70
 10 " 41 70
 Towel over 1500 shov 2.03
 heaving in 2.25 up 2.40
 375 fms out -
Forpata (V) *Scoloplos* abd. *Physiculus* abd.
Macrurus *Quirca* abd. *Scoloplos* n.s. (V)
Macrurus *carminatus* abd.
Medusis *viridis* *Libinia* *marina*
Halimeda *semita*
Stomatopoda *pinna*

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day,

State of sky,

Temperature of air,

surface of water,

at depth of

fathoms,

of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Repeating Transit

1113

Aug 22 1882

Off. Martha's Vineyard

Lat 39° 57' N
Long 70° 37' W

145 ; of tide,

bc

75

72

5 fathoms, 71 1/2 100 125

43

184 = 192

green mud

NE 1/2 E

North 1'

1/2 S 1/2 E

30 " 46

Fish Hawk

U.S. Fish Comm

Lt. Z. L. Tanner USN

35 36
W. L. V. 11

1114
REMARKS.

2
Trawl 300; 248 down 2.58"
heaving in 3.16 up 3.25
307. Trawl out

Physalia physalis (1) *P. physalis*, 20
Macrurus carminatus 10
" *Tarantula* 1/2
Sebastes marinus (1)

TEMPERATURE RECORD.

Instrument used,

Fish Hawk

Current number of observation,

1114

Date,

Aug 22 1884

Locality,

off Cape Cod

Bearings,

*Lat 39° 58' N
Long 70° 38' W*

Time of day, *2 1/2* : of tide.

State of sky,

b, c

Temperature of air,

72

" surface of water, *72*

" at depth of *5* fathoms, *71 1/2 10 fms 65*

" of bottom, *4 3*

Depth, in fathoms, *164 = 171*

Nature of bottom, *green mud*

Direction of surface current,

W 1/2 S

Force of surface current,

N x W 1'

Direction of bottom current,

at 50 fms 43°

Force of bottom current,

" 50 " 49"

Name of vessel,

Fish Hawk

To what service attached,

U S Fish Comm

Name and rank of commanding officer,

J. L. Tanner 1884

Name and position of observer,

*W. H. Bliss
U S Fish Comm*

0 Volcan. thermometers

4 71 2 47 11

1115-

REMARKS.

Dredge over 3,35 down 3,44
heaving in 4,11 up 4,20
275 fms out
No fish

TEMPERATURE RECORD.

Instrument used,

Rake Dodge

Current number of observation.

1115

Date,

Aug 22, 1882

Locality.

off Martha's Vineyard

Bearings,

Lat $39^{\circ} 59' N$
Long $70^{\circ} 41' W$

Time of day, 3.28 ; of tide,

State of sky,

bc

Temperature of air,

75

" surface of water,

72 1/2

" at depth of 5 fathoms,

72 at 10 fms 70

" of bottom,

45

Depth, in fathoms,

140 = 14 f

Nature of bottom,

Green mud & sand

Direction of ~~surface~~ current.

NE from

Force of surface current.

NE 3/4

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Comm

Name and rank of commanding officer

Lt. Z. L. Tanner U.S.N.

Name and position of observer,

J. J. Allen
Master U.S.N.

1116
REMARKS.

Trawl over 4.26 down 4.33
heaving in 4.53 up 5.12
300 fms out

W-5,500 fms standing in 146 fms

Merluccius bilinearis (few)

Urophycis piscatorius

Phycis chetani *Raja cyathotis*

Stenopterus cyathotis "

Urophycis carinatus (few)

Scorpaena dactyloptera

Sebastes marinus

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1116

Date,

Aug 22 1882

Locality,

Off North's Island

Bearings,

Lat $39^{\circ}59'N$
Long $70^{\circ}44'W$

Time of day,

7:10 ; of tide,

State of sky,

7:10

Temperature of air,

77

"

surface of water,

72

"

at depth of

5

fathoms,

72 10 fms 68

"

of bottom,

46

Depth, in fathoms,

138 = 124

Nature of bottom,

fine sand

Direction of surface current,

SE 1/2 mile

Force of surface current,

2 1/2 miles

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

US Fish Comm

Name and rank of commanding officer,

Lt. Z. L. Tanner USN

Name and position of observer,

J. S. White
Mid. USN

11/17

REMARKS.

2 haul over 5,37 down 541
heaving in 6.08 up 6.12
240 ft. of haul

Arctichthys blennioides (few)
Glyptocephalus synonymus (few)
Meracanthodes punctatus
Sebastes marinus (few)
Trigloporus (few)

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation.

1117

Date,

Aug 22, 1882

Locality,

Off Martha's Vineyard

Bearings.

Lat 40°-02' N
Long 70°-45' W

Time of day, 5 30 : of tide.

State of sky,

bc

Temperature of air,

78

" surface of water, 72

" at depth of 5 fathoms, 72 10 fms 67

" of bottom, 48

Depth, in fathoms, 85 = 89

Nature of bottom,

fine sand

Direction of surface current.

Force 3

Force of surface current.

N x E 1'

Direction of bottom current.

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Fish Comm

Name and rank of commanding officer.

Lt. Z. L. Tanner U.S.N.

Name and position of observer,

J. B. Schott
Midw. U.S.N.

1118
REMARKS.

Trawl over 6.25 down 6.30
heaving in 6.35 up 6.40
240 fms out

Paralichthys oblongus (juv)
Sebastes marinus (juv) *Phycis tenuis* 5/

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1118

Date,

Aug 22 1872

Locality,

off Martha's Vineyard

Bearings,

Lat 40°-03' N
Long 70°-45' W

Time of day, 6.20 ; of tide,

State of sky,

bc

Temperature of air,

74

" surface of water, 72

" at depth of fathoms,

" of bottom, 49

Depth, in fathoms,

67 = 70

Nature of bottom,

fine sand

Direction of surface current,

drift in force 2

Force of surface current,

drift NW 1/2

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Fish Comm

Name and rank of commanding officer,

Lt. Z. L. Tanner 1872

Name and position of observer,

W. L. Lusk
Sept 1872

1119
REMARKS.

Trawl over 6:37 down to
bottom in 7:12 up 7:22
215 fms out
At 5:22 got following in 15 min
Large *Neptunia decemcostata*
Archaos Americanus
Physiculus sp. aff. *laevigatus*
Large *Neptunia decemcostata*
Archaos Americanus

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1119*
 Date, *Aug 26 / 1882*
 Locality, *off Nantuxant*
 Bearings, *Lat 40°-08' N*
Long 68°-45' W
 Time of day, *6.32* : of tide.
 State of sky, *bc*
 Temperature of air, *68*
 " surface of water, *65*
 " at depth of *5* fathoms, *65*
 " of bottom, *48*
 Depth, in fathoms, *93 = 97*
 Nature of bottom, *sand & shells*
 Direction of surface current, *WNE force 3*
~~Force of surface current,~~ *drift N 5 1/2 N 3/4*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *U.S. Fish Comm*
 Name and rank of commanding officer,
J. L. Tanner USN
 Name and position of observer,
J. G. Holt
Midshipman

found 12-13-89 station S. 03

Leaving in 8:30 and 8:45-

Libinia maritima (var. *Libinia angustata*) (2)

Microtus pennsylvanicus (Zinn) (m)

1. *Carminatus* (54)

Nola radiata (Nw) *Physa* *Physa* (juv)

crinacea /ru/ decius /ru/

fin. *Merluccius bilinearis* (L.)

- deep-water basket-star fish

Leptoglyphe Fumensis, new sp.

fore taken by us

Volium Abundant pag.

Heliconia decumbens L.

John Doe/owner

Redigean myeloma

Lipha subdora

Adelonia furcata

Arceuthobium complanatum

Hydrochloric acid, 20 ccs.

General Reflections on the subject

Transcribed by W. P. M.

Zosterops lateralis

Pyrausta nigrilata

Contract of Insurance

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1120*

Date, *Aug 2nd*

Locality, *Off Cape Cod*

Bearings, *Lat 40° 05' N*
Long 68° 48' W

Time of day, *7:41*

; of tide, *low*

State of sky, *b.c.*

Temperature of air, *69*

" surface of water, *65*

" at depth of *5*

fathoms, *65 at 10' 56*

" of bottom, *4 3/2*

Depth, in fathoms, *186 = 194*

Nature of bottom, *fine sand & shells*

Direction of surface current, *drift NW 1/2 N 3*

Force of surface current, *1 1/2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S. Fish Comm*

Name and rank of commanding officer, *Lt. L. L. Lawrence*

Name and position of observer, *J. B. Smith*
U.S.N.

1121

REMARKS.

Sawd over 9.18 down 9.28
 moving in 9.48 up 10.05
 550 fms out

Sebastes marinus few unknown (surface)

Palaeomonas Bairdii *Merluccius bilinearis*

" *carminatus*

Cottunculus microps

Cyclopterus lumpus (surface)

Large lot *Ophiacantha millespinosa*

Lot *Bolobina* *Ludlowi*

" *Hyalinarcia artifice*

Dolium Bairdii frag

Pecten vitreus

Urticina callosa

Paramuricea borealis (rare corall)

Antidore deudaturn

Porania grandis, very large

Dolaster *Earlie*

Lophaster furcifer (very rare

+ not taken in this region

before)

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1121*

Date, *Aug 20th 1882*

Locality, *off Nantucket*

Bearings, *Lat 40° 04' N
Long 68° 49' W*

Time of day, *9.55* ; of tide, *low*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *65*

" at depth of *5* fathoms, *64 10 fms 56*

" of bottom, *4 1/2*

Depth, in fathoms, *22 1/2 = 23 1/2*

Nature of bottom, *fine sand & shell down*

Direction of surface current, *WNE Force 4*

Force of surface current, *Drift WNW 1"*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *W Fish Comm*

Name and rank of commanding officer, *H. L. L. Tanner USN*

Name and position of observer, *J. C. Smith USN*

1122

REMARKS.

Trawl over 10.38 down 10.50
heaving in 11.23 of 1145
Corpus out.

Leptasterias maritima (juv) *Halosiphonia* (1)
Great lot *Adiantum Hornum*
with *Astrochelys* *Hornum* out
Pecten vitreus on *Adiantum*

2000

TEMPERATURE RECORD.

Instrument used.

Current number of observation,

Date, _____

Locality,

Bearings.

Long 68°-50' W

Time of day, 10.28 ; of tide.

State of sky.

Temperature of air,

surface of water, 67

at depth of 5 fathoms, 66 at 10 fms 60

.. of bottom, 40 7/2

Depth, in fathoms, 337 = 155.

Nature of bottom.

Direction of ~~surface current~~.

~~Force of surface current.~~

Direction of bottom current.

Force of bottom current

Name of vessel,

To what service attached.

Name and rank of commanding officer.

Lt. L. L. Lamm 1800

Name and position of observer _____

Signature of observer: *Bobbin M. de Vries*